



STUDY SESSION ITEM SUMMARY

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| DATE OF STUDY SESSION: September 27, 2022 |
| SUBJECT: Land Use Updates |
| OFFICE/DEPARTMENT: Community and Economic Development |
| CONTACT: Jenni Hall, Director of Community and Economic Development |
| FINACIAL IMPACT: None |
| SUPPORT/RESOURCES REQUEST: None |
| DIRECTION NEEDED: Should staff pursue 1) Fiscal Impact Analysis modeling and 2) regulations pertaining to crypto mining and data centers? |
| RECOMMENDED ACTION: 1) Conduct a Fiscal Impact Analysis and 2) Develop regulations for crypto mining and data centers during the Development Standards Overhaul (DSO) process. |

DISCUSSION POINTS:

Fiscal Impact Analysis

- A Fiscal Impact Analysis Model is a tool that can be used to estimate the costs and revenues associated with land use decisions so a jurisdiction can better understand the financial impacts of development plans in terms of public services and facilities needed to serve new development.

Cryptocurrency Mining / Data Center Land Use Regulations

- Adams County Development Standards and Regulations (DSR) does not allow for the development of data centers / crypto mining.
- Multiple data center / crypto mining facilities have been identified throughout Adams County.
- If data center / crypto mining facilities are to be allowed, the DSR needs to be updated to include regulations and performance standards to minimize potential safety, environmental, and nuisance issues that could impact the community.

Land Use Updates

Community & Economic Development Department

September 27, 2022



Overview

- Fiscal Impact Analysis
 - Purpose and scope
 - Integration and timing
- Data Center Land Use Regulations

Fiscal Impact Analysis

A **Fiscal Impact Analysis Model** is a tool that can be used to estimate the costs and revenues associated with land use decisions so a jurisdiction can better understand the financial impacts of development plans in terms of public services and facilities needed to serve new development.

- Information may be provided in easy-to-interpret visual mapping format.
- Can run concurrently with other large-scale planning work such as the nexus & feasibility studies for affordable housing (in progress), as well as the proposed water inventory & analysis in 2023.

Cryptocurrency Mining / Data Center Land Use Regulations

- Background
- Current Regulations for Data Centers
- Legal Update
- Potential Community Impacts
- Potential Economic Impacts
- Regulations & Best Practices
- Staff Recommendation

Background

What is crypto mining?

- A continuous process where computers work to solve algorithms to maintain and build a blockchain, and in exchange are granted cryptocurrency.
- Mining is carried out using high-powered computers that compete to be the first to solve complex mathematical puzzles. As more miners join the system, algorithms become increasingly difficult requiring more computing power to solve.

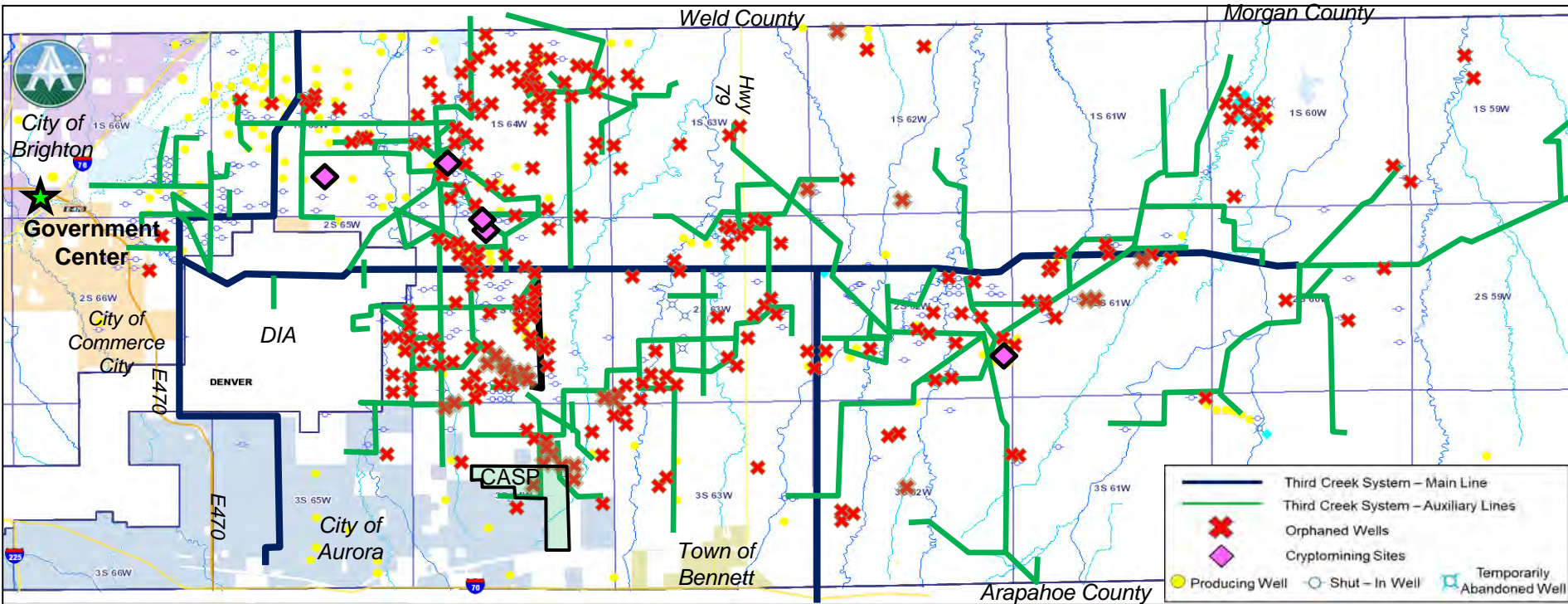
What is a data center?

- A facility that centralizes an organizations shared IT operations and equipment for the purpose of storing, processing, and disseminating data and applications.



Background (continued)

Third Creek Pipeline



Current Regulations

- Section 3-06 describes the land use categories in the DS&R
- Section 3-05-01 states:
“[n]o use not specifically permitted or conditionally permitted in a district shall be allowed unless the Director of Community and Economic Development determines the use is similar to an expressly permitted use.”
- No use is substantially similar to a data center or crypto mining, so it has been determined to be prohibited
- Regulations need to be amended to allow for the use and establish performance standards

Legal Update

The County Attorney's Office filed a lawsuit against landowners and Renegade Oil and Gas on July 11, 2022

- This lawsuit requests a permanent injunction to prevent crypto mining occurring on the site
- The case is ongoing

Potential Community Impacts

- **Noise and Light Pollution:**
 - Data centers require soundproofing / special construction techniques
 - Data centers require bright lights, gated access for security
 - Crypto mining sites can reach levels up to 80dBA (power generators)
- **Electricity Demand:**
 - Data centers require large electrical load to power computers/servers
- **Water Usage:**
 - High volume of potable water used for cooling
 - Fire suppression
- **Air Pollution:**
 - Primarily from gas-powered generators at well-pad crypto mining sites
- **E- Waste:**
 - Systems need to be replaced periodically for faster processor capacity

Potential Community Impacts (continued)

- **Lack of State and Local Regulations:**
 - Operating without a permit from COGCC or the County
 - No safety protocol provided to the County in the event of an emergency (i.e., fire, explosion, etc.)
- **Location:**
 - Difficult for first responders to locate site if data center operation is unknown



Potential Economic Impacts

- **Jobs:**

- Data centers typically require minimal staffing
- Temporary construction jobs for the development of new data centers

- **County Tax Revenue:**

- Real Property
- Personal Property



Regulations & Best Practices

- **Safety:**
 - Approved electrical permit and written verification that the electrical work has passed a final inspection (**Moses Lake, WA / Wenatchee WA**)
- **Compatibility:**
 - Acoustical study prepared by a professional acoustical engineer that demonstrates that the use will not violate allowable noise levels in adjacent areas (**Prince George County, MD**)
 - All equipment necessary for cooling, ventilating, or otherwise operating the facility must be contained within an enclosed building where the use is located (**Fairfax County, VA**)

Regulations & Best Practices (continued)

- **Sustainability:**

- Verification must be provided that all electronic waste generated at a crypto-mining operation will be handled by a DEQ-licensed electronic waste recycling firm (**Missoula, MT**)
- Any crypto mining facility shall be required to develop or purchase sufficient new renewable energy to offset 100 percent of the electricity consumed by the cryptocurrency (**Missoula, MT**)

- **Public Notice:**

- Public notice must be provided to adjacent owners as part of the permit process (**Wenatchee, WA**)

- **Emergency Preparedness:**

- As part of any crypto mining permit, applicant will need to provide a contingency plan in the event of an emergency on site

Staff Recommendation

- Develop regulations for data centers during the DSO process
- Create regulations and performance standards for data centers as primary use
- Consider allowing data centers as an accessory use to:
 - Solar energy systems
 - Oil and gas facilities
 - Hydroelectric energy
 - Geothermal energy